

### REMARKS

This amendment is submitted in response to the Examiner's Final Action dated March 4, 2004. Applicants have incorporated subject matter from dependent claims (now canceled) into their respective independent claims. These amended independent claims more completely recite the novel features of the invention. No new matter has been added, and the amendments place the claims in better condition for allowance, while reducing issues for appeal. Applicants respectfully request entry of the amendments to the claims. The comments/arguments provided below to rebut the claim rejections reference the claims in their amended form.

### CLAIM REJECTIONS UNDER 35 U.S.C. § 103

At paragraph 5 of the Office Action, Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Flory, et al.* (U.S. Patent No. 6,009,476) in view of *Chang, et al.* (U.S. Patent No. 6,604,136B1). The combination of *Flory* and *Chang* does not render Applicants' claimed invention unpatentable because that combination fails to suggest to one skilled in the art several features recited by Applicants' claims.

Applicants hereby incorporate by reference the arguments proffered in Amendment A. Specifically Applicants reiterate that the combination of *Flory* and *Chang* fails to suggest to one skilled in the art the following features:

(1) loading one or more of a plurality of functional components that provide the desired network processor functionality;

(a) including "external APIs, low level APIs, and physical transport interfaces of a device driver;" (Cl. 2)

(b) loading a customer definable service component within said external (APIs) that includes a customer desired network service, which is operable within said network processor services architecture (Cl. 3)

(2) providing a utility that provides an OS-independent communication interface for the plurality of functional components and enables bi-directional communication between the network processor functionality and the OS; and

(3) packet is decoded into a common code understandable by said OS and said functional components, wherein the utility also converts all low and high level APIs of various components into a specific communication type utilized by the network processor functionality.

Applicants' independent claims now also recite:

(4) a translation utility, which translates all incoming and outgoing service requests into a common network processor language to permit seamless connection and correspondence between said one or more network processors, said operating system, and each of said functional components to enable handling of network packets.

From the above, it is clear that Applicants' claimed invention describes "network processor services architecture" for a "distributed processing system" with multiple processors interconnected via some external interconnection mechanism (e.g., a switch). One skilled in the art would recognize that a network processor services architecture within a distributed system containing multiple network processors involves specific operating protocols and interconnection methods, as well as unique process control functionality. A skilled artisan would not mistake *Flory's* operations on a single computer with an internal processor and OS as being suggestive of the more complex configuration, functionality and operation on a distributed processing system that supports a network processor services architecture.

The claims are specifically directed to communication among the various processor components and functional components that connect to and interact with the network processor services architecture, some of which are external components with external APIs. The claims also provide for a translation of service requests into a common network processor language to permit correspondence between one or more network processors.

*Flory* provides a description of a single/individual computer system with a device driver that includes a device driver library with selectable execution contexts. As such, all functional features provided by *Flory* reference single system environment, which is inherently different from the inter-operation involved with the distributed system environment (with multiple network processors) as described by Applicants' claimed invention.

Examiner correctly states at paragraph 7 of the Final Action that *Flory* does not teach a network processor and methods of handling packets within a distributed system environment as recited by Applicants' claims. Examiner references *Chang* for support of this feature.

Assuming support could be found for this combination, the combination still does not render Applicants' claimed invention unpatentable since the combination does not suggest key features of Applicants' claims, several of which are listed above. For example, Col. 7, line 45-col.8, line 65 and col. 10, lines 21-30 are devoid of any reference of an external API or loading an external API. Those sections are very clear with respect to types of APIs supported, including an "OS API" and a "proprietary API". As recited by *Flory*, "[t]he shell module is the initial componet of the device driver 50 loaded into the memory as part of the initialization of the operating system kernel 56 during system startup" (ll 59-62). *Flory* also states that the OS API "provides the operating system kernel 56 and any extensions 58 with entry points into the device driver 50" (ll 45-48). Clearly, none of these features suggest an external API utilized within a distributed system and the functionality associated therewith.

With respect to Claim 9, since *Flory* does not provide any network functionality (admitted by Examiner in paragraph 7) *Flory's* mention (at col.22, lines 27-46) of support for a new partial API, "either as newly defined by the operating system layer 54 or to support calls originated directly from an application 60" is clearly within the single computer environment. Nothing in that section of *Flory* suggests "loading ... external APIs... customer desired network services, which is operable within the network processor services architecture.

Similarly, with respect to Claim 10, *Flory*, as a single computer environment does not suggest bidirectional connection between the utility and "one or more network processors."

As correctly noted by Examiner, the features of Claims 12, which are now incorporated into the independent claim 7, are not taught (or suggested) by col. 22, lines 47- col. 23, line 6 of *Flory*. Those features are also not suggested by col. 7, line 48-63 of *Chang*. That section of *Chang* describes a host system connected to a network processor via a PCI bus. That section

also discusses that other communication techniques may be used, and lists the various applications within which the network processor may be used. The section is, however, devoid of any reference or suggestion of translating service requests into a common network processor language ... one or more network processors....," according to the claim.

Clearly, neither reference teaches or suggests the functionality associated with the "utility" or the specific method of processing received packets including converting/translating the packets into a communication type utilized for communications amongst the network processors and other components. Other listed features are also not provided by the references or combination thereof.

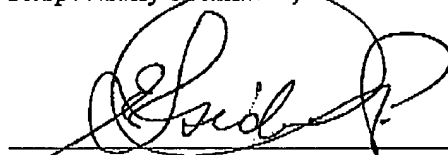
Given the above reasons, it is clear that the combination of references does not suggest key features of Applicants' invention and that one skilled in the art would not find Applicants' invention unpatentable over the combination of references. The above claims are therefore allowable over the combination.

**CONCLUSION**

Applicants have diligently responded to the Office Action by amending the claims to more completely present the novel features of the invention in single independent claims. Applicants have further explained why the claims are not unpatentable over the combination of *Flory* and *Chang*. The amendments and arguments overcome the §103 rejections, and Applicants, therefore, respectfully request reconsideration of the rejections and issuance of a Notice of Allowance for all claims now pending.

Applicants also request the Examiner contact the undersigned attorney of record at 512.343.6116 if such would further or expedite the prosecution of the present Application.

Respectfully submitted,



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